

REMARKS

Claim 26 is pending in this application. Claims 21, 22 and 25-27 have been withdrawn from consideration. Claim 26 has been rejected under 35 USC §102(e) as anticipated by Narang (US 5,830,600) (the '600 patent). The examiner argues that Narang specifically discloses the compound recited by instant claim 26 in column 7, lines 57-64. Furthermore, the examiner argues that Narang teaches a specific example using tri-(methoxyethyl)phosphate (TMEP) as the solvent and LiPF<sub>6</sub> as the salt of the electrolyte of a lithium cell as disclosed in Table 2.

In the applicant's view, the Narang reference does not provide the required specificity in order to anticipate claim 26. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. Of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, the identical invention must be literally present as arranged in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). MPEP §2131.

The Narang reference is encyclopedic in nature with respect to the "fire retardant" solvents and the Lithium salts therefore, it does not provide adequate specificity to support the anticipation rejection. "[P]icking and choosing" from an encyclopedic disclosure will not ordinarily anticipate. *Air Products and Chemicals, Inc. v. Chas. S. Tanner Co. Et al.*, 219 USPQ 223, 231 (DC SC 1983). The Narang reference requires one of ordinary skill in the art to select from a number of different

solvents and salts to produce an electrolyte. Narang describes one embodiment of the invention as a fire-retardant electrolyte composition prepared by dissolving a lithium salt in a fire retardant solvent. Further, Narang describes that preferred lithium salts include compounds of the formula Li--A wherein A is an anion which may be Cl,  $\text{CF}_3\text{SO}_3$ ,  $\text{ClO}_4$ ,  $\text{BF}_4$ , Br, I, SCN,  $\text{AsF}_6$ ,  $\text{N}(\text{CF}_3\text{SO}_2)_2$ ,  $\text{PF}_6$ ,  $\text{SbF}_6$ ,  $\text{O}(\text{CO})\text{R}'$ , wherein  $\text{R}'$  is H, alkyl, aryl, alkenyl, halo, haloalkyl, or the like. Narang goes on to disclose that preferred salts include  $\text{LiPF}_6$ ,  $\text{LiAsF}_6$ ,  $\text{LiN}(\text{SO}_2\text{CF}_3)_2$  and mixtures thereof. Furthermore, Narang incorporates by reference the disclosures of two other patents in order to include single-ion conducting polymer electrolytes as included in the term "lithium salt." Column 10, lines 17-40). Thus, Narang discloses an endless list of possible salts to choose from.  $\text{LiBF}_4$ , involved in applicants' claim 26, is not listed as a preferred salt, nor is this salt used in the examples cited by the examiner. Table 1 and table 2 of Narang utilize  $\text{LiPF}_6$  as conducting salt. Accordingly, the Narang reference cannot anticipate claim 26 of the instant application because the compound cannot be at once envisioned from the Narang reference.

The Examiner also argues that the  $\text{CO}_2$ -generating compound of the reference is merely optional and thus includes the compositions without the compound. However, the disclosure specifically points out the advantages of the battery containing the compound. One of ordinary skill in the art would be aware that the performance of storage cells is greatly influenced by the durability of the electrolyte. (See generally, the publications incorporated by reference in applicants specification, page 12, lines 20-21).

Specifically, WO 97/16862 (cited in applicants specification) discloses that solvents may evaporate over time or may present fire hazards. (Page 2, lines 17-23). Narang describes that a battery containing a CO<sub>2</sub>-generating compound is capable of being charged, discharged and recharged over a greater number of cycles. (Column 11, lines 50 to 53). Thus, Narang is ambiguous regarding the necessity of the CO<sub>2</sub>-generating compounds because it teaches the advantage of adding the compound to one of ordinary skill in the art. Accordingly, taking the disclosure of Narang as a whole, one of ordinary skill in the art would consider the presence of the CO<sub>2</sub>-generating compounds, necessary for success. This conclusion is supported by the examples of Narang.

Tables 1 and 2 provide examples wherein the electrolyte does not contain a CO<sub>2</sub>-generating agent and multiple examples where the electrolyte does contain a CO<sub>2</sub>-generating agent. However, it is clear the examples containing the CO<sub>2</sub>-generating agent increase the number of cycles which are achieved by using the lithium-ion battery. Specifically, in table 2, line 2 an electrolyte comprising TEP and LiPF<sub>6</sub> is utilized, resulting in 15 cycles achieved by using this lithium-ion battery. In contrast, lines 11-14 show electrolytes with the same solvent and salt with the addition of the CO<sub>2</sub>-generating agent, DTBD (di-tert-butyl dicarbonate). This results in considerably higher number of cycles achieved; 48-52. As a result of reading this disclosure, one of ordinary skill in the art would never use a lithium-ion battery without the CO<sub>2</sub>-generating compounds. Moreover, the transitional phrase of claim 26 excludes these types of agents from the scope of the claim.

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Respectfully submitted,

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